

vacuum processing chamber for converting process gas to plasma by high frequency waves and processing said substrate by said plasma; and

a common transfer chamber airtightly connected to said plurality of plasma processing units and including a transfer arm for transferring said substrate to said mounting stage in a fixed transfer direction and in a state that said reference point of said substrate is positioned with respect to said transfer arm,

wherein for each of said plurality of plasma processing units, the position of said wave guide in relation to said transfer direction of said transfer arm is the same.

2. (Amended) The plasma processing apparatus according to Claim 1, wherein the apparatus is configured to perform a film forming process.

3. (Amended) The plasma processing apparatus according to Claim 1, wherein the apparatus is configured to perform an etching process.

7. (Amended) The plasma processing apparatus according to Claim 1, wherein said wave guide of each of said plasma processing units has the same length and the same sectional shape.

8. (Amended) A plasma processing method for performing a predetermined process for a substrate by a plasma processing apparatus comprising a plurality of plasma processing units, each having a vacuum processing chamber including a mounting stage for mounting a substrate with a fixed reference point and a wave guide

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bent at an angle for introducing high frequency waves into said vacuum processing chamber for converting process gas to plasma by high frequency waves and processing said substrate by said plasma; and a common transfer chamber airtightly connected to said plurality of plasma processing units and including a transfer arm for transferring said substrate to said mounting stage in a fixed transfer direction, comprising the steps of:

transferring said substrate with said reference point to said mounting stages of said plasma processing units from said transfer chamber, said reference point of said substrate being positioned the same in each of said plasma processing units with respect to said wave guide, and

performing a plasma process for said substrate while the position of said reference point of said substrate in relation to said wave guide is kept the same for each of said plasma processing units.

9. (New) A plasma processing apparatus comprising:

a plurality of plasma processing units, each including,

a vacuum processing chamber including a mounting stage for mounting a substrate with a fixed reference point, and

a wave guide bent at an angle for introducing high frequency waves into said vacuum processing chamber for converting process gas to plasma by high frequency waves and processing said substrate by said plasma,

wherein the position of said reference point of said substrate in relation to said wave guide is the same for each of said plurality of plasma processing units.

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